The frictional resistances met with in the cinder pockets will be assumed as equal to those computed for the neck.

The uptakes will be proportioned as follows, and their frictional resistances computed:

	Gas on Gas	Air on Air	Gas on Waste Gas	Air on Waste Gas
Q_t — volume of gases flowing . .	28 m^3 75	45 m^3 99	35 m^3 66	52 m^3 08
co = area of uptake, N ~~ number of uptakes	2 m^2 1	4 m^2 60 2		
2^ — velocity, actual	14 m	10 m	17 m	11 m
$ = perimeter	5 m	12 m		
L ~~ height =	3 m			
$£_•_w$ —	7 50	7 83		
7 — frictional resistance in kg per m^2 =	0 kg 360			
0 016X7 83X10 00X0		0 kg		
0 016X7 50X17 83X0			0 kg	
0 016X7 83X11 32X0				0 kg
The pressure necessary to impress their velocity upon the — A<(i)2 — '2(1}	2 kg	1 kg	3 kg	1 kg

The assumption is made that the turn into the uptakes for the incoming gas and air absorbs the velocity in the necks and cinder pockets.

	Gas on Gas	Air on Air	Gas on Waste Gas	Air on Waste Gas
Frictional resistance of f air and gas ·				
$= perimeter (assumed)	6 m	10 m		
L =length	5 m	6 m		
$C4$ = area	3 m^2 00	5 m^2 25		
t = average	500°	150°	800°	600°
i_r_,y__ ₘo ₛ factor	2 835	1 5505	3 936	3 202